# 75th Air Base Wing



# Utilizing a Central Database for Maintaining Regulatory Compliance and Emission Inventories at Hill Air Force Base

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#### Introduction



# Hill Air Force Base (HAFB) and the Utah Test and Training Range (UTTR)

- Command Core System (CCS)
- Air Program Information Management System (APIMS)
- Enterprise Environmental, Safety, and Occupational Health – Management Information System (EESOH-MIS)



#### **APIMS** data



#### Stored APIMS information (air processes)

#### Emission source

- Process ID
- Air Quality Unique Identifiers System Identification (AQUIS ID)
- Location, source category, equipment, authorized materials, algorithms, and regulatory information

#### Emission Calculation

- Consumption
- Algorithms
- Emission factors



#### **EESOH** data



- Stored EESOH information (bio processes)
  - Activities affecting worker health
  - AQUIS ID
  - Hazardous material consumption
  - Hazardous material information
    - specific gravity
    - density
    - chemical constituents
    - volatile organic compound (VOC)



# Regulations and Inventories



- Title V
- New Source Performance Standards
- National Emission Standards for Hazardous Air Pollutants (NESHAP)
- Air Emission Inventories (AEIs)
  - Annual
  - Mobile
  - Greenhouse gas

#### Data calls

- EPA
- AFMC
- USAF headquarters
- UDAQ



#### **Title V Certification Data**



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#### Major source

- 10 tons/yr of a hazardous air pollutant (HAP)
- 25 tons/yr of any combined HAP
- 100 tons/yr of any other air pollutant

#### Conditions

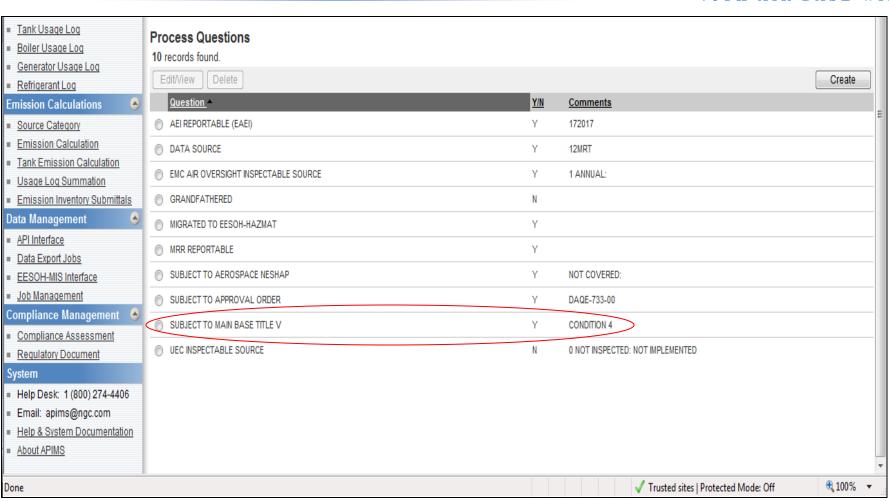
- HAFB
  - •51 source-specific conditions
  - •9 source-wide conditions
- UTTR
  - •16 source-specific
  - •5 source-wide
- Process Questions and Comments



#### **Question and Comment**



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### **Report Certification**



- Tenant Organizations
- Report routing
- Due dates
  - Main Base Title V and Aerospace NESHAP 90 days
  - UTTR Title V 60 day
  - Various NESHAP 30 days



## 12 Month Rolling Data



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#### 12 Month Rolling Total (MRT)

- Consumption or emission limit for some emission sources
  - Example: Non-chemcial depainting not to exceed 2,350 tons of media throughput
- 20 Title V conditions
- 274 processes (emission sources) in the database
- Capability to import large amounts of data at once

#### Quality Assures data on monthly basis

- Monthly consumption records
- 50% of data is already entered at the end of reporting period



#### **Emission Inventories**



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- Maintenance and Organization of Data
  - Process Question and Comment

Association with another air source

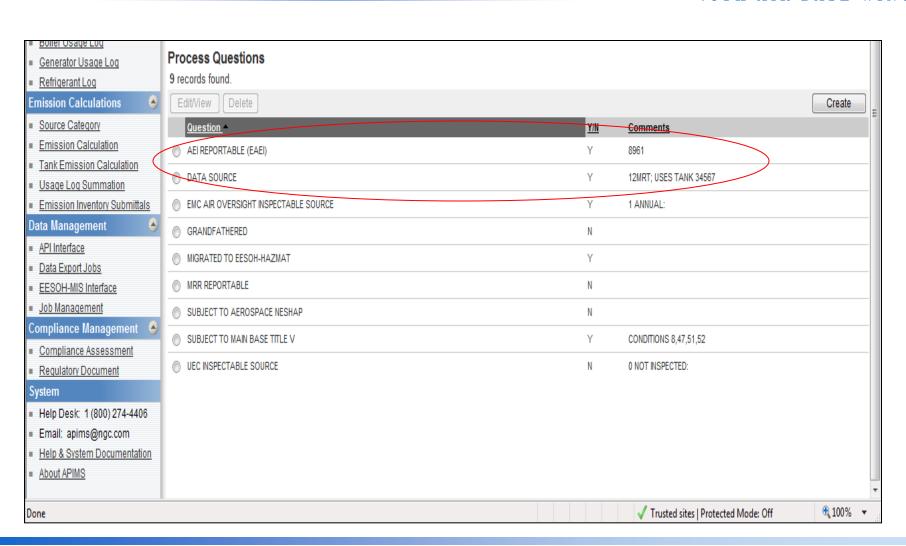
Contact



#### **Emission Inventories**



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#### **Emission Inventories**



#### EESOH material inventory

- Consumption data
- 2010 AEI ~ 400,000 records

#### Data calls

- Greenhouse gas
- Sulfur hexafluoride
- Refrigerants
- Residual Risk
- Boilers



#### **Hazardous Material Data**



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- Process calculations based on hazardous material consumption:
  - Surface coating
  - General solvent usage
  - Paint gun cleaning
  - Chemical stripping and depainting
  - Thermal metal spray
  - Nondestructive inspection
  - Process tanks
- Essential chemical information
  - Chemical Abstract Service (CAS) number
  - Chemical name
  - Pollutant category
- Material information



## Summary



- Having a central database is essential for the HAFB Air Quality program.
  - Central database is necessary to prepare AEI's
  - Maintain Title V and NESHAP compliance
  - Maintain and organize a large number of sources
  - Save time by using process question and comment fields
  - Monthly consumption totals
  - Storage of material data



# **Questions?**

